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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
5 POST OFFICE SQUARE, SUITE 100
BOSTON, MASSACHUSETTS 02109-3912

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

JUL 29 2010

Mr. Jeffrey Lane
Environmental Specialist
Boston Public Schools
Planning and Engineering – Environmental Division
1216 Dorchester Avenue
Dorchester, Massachusetts 02125-1504

Re: Risk-Based PCB Cleanup and Disposal Approval under
40 CFR § 761.61(c) and § 761.79(h)
Richard J. Murphy School
Dorchester, Massachusetts

Dear Mr. Lane:

This is in response to the Boston Public Schools (BPS) Notification[1] for approval of a proposed PCB cleanup at the Richard J. Murphy School, 1 Worrell Street, Dorchester, Massachusetts (the Site). The Site contains PCB caulk that exceeds the allowable PCB levels under the federal PCB regulations at 40 CFR § 761.20 and § 761.62. PCBs concentrations have also been identified in adjacent building surfaces which exceed the allowable PCB levels for *unrestricted use* under 40 CFR § 761.61(a).

BPS has requested an approval to address PCB contamination at the Site under 40 CFR § 761.61(c) and § 761.79(h). BPS is proposing the following activities under this project:

- Remove and dispose of all exterior PCB caulk, including caulk with less than (<) 50 parts per million (ppm) PCBs;
- Decontaminate *non-porous surfaces* (i.e. metal window frames) to less than (<) 10 µg/100 cm^2;
- Encapsulate PCB-contaminated exterior concrete and/or brick with 2 coats of an epoxy coating and installation of new caulk;

[1] The plan was prepared by Resource Controls on your behalf to satisfy the requirements under 40 CFR §§ 761.61(c) and 761.79(h). Information was received dated July 09, 2010 (PCB Waste Plan); July 26, 2010 (Addendum to PCB Waste Plan); and July 26, 2010 (e-mail on windows). These submittals and shall be referred to as the "Notification."

- Implement a long term maintenance and monitoring for the encapsulated areas; and,

- Record a deed notice to document the PCB concentrations at the Site and the long-term maintenance and monitoring requirements.

As indicated in the Notification, decontamination of the window frames to a < 10 µg/100 cm^2 is the project goal. However, BPS is proposing a decontamination standard of < 100 µg/100 cm^2 (the *low occupancy area* cleanup standard under § 761.61(a)) for window frames located at or above 10 feet in the event that the < 10 µg/100 cm^2 cannot be achieved. BPS has determined that the window exteriors located at or above 10 feet are not readily accessible to building users given the location and the fact that the windows are inoperable.

Based on the EPA's review, the information provided in the Notification meets the requirements under 40 CFR § 761.61, § 761.62, and § 761.79(h) for cleanup of *PCB remediation waste* and removal and disposal of *PCB bulk product waste*. EPA finds that the proposed encapsulation of PCB-contaminated concrete and/or brick with an epoxy coating should effectively prevent direct exposure of these PCB surfaces to building users and thus should be protective of public health and the environment.

BPS may proceed with its project in accordance with 40 CFR § 761.61(c); § 761.62; § 761.79(h); its Notification; and this Approval, subject to the conditions of Attachment 1. Under this Approval, EPA is reserving its right to require additional investigation or mitigation measures should the results of the initial abatement work or the ongoing monitoring results indicate that an unreasonable risk to building users remains following the abatement activities.

This Approval does not provide for cleanup and disposal of PCB-contaminated soils as analytical results indicate PCB concentrations in the surrounding soils are < 1 ppm. With respect to the caulk and window glazing which have PCB concentrations at less than (<) 50 ppm, BPS has determined that the these products meet the definition of an *Excluded PCB Product* as defined at 40 CFR § 761.3. As such, cleanup and disposal of these products are not addressed in this Approval. In its Notification BPS has indicated that the exterior caulk will be removed.

In its Notification, BPS has indicated that a PCB fact sheet will be distributed to building users that will be present during remediation activities. In addition, information on the PCB contamination at the school and the remediation efforts will be distributed to students and faculty in the BPS handbook. EPA also would recommend that the outreach efforts include a distribution of the PCB information to parents.

Please note Attachment 1, Condition 13b. Under this Approval EPA is requiring a higher frequency verification sampling for the decontaminated window frames than was proposed in the Notification. The higher frequency sampling requirement is based on the fact that BPS provided no data to support its proposed sampling frequency.

Questions and correspondence on this Approval should be directed to:

Kimberly N. Tisa, PCB Coordinator
United States Environmental Protection Agency
5 Post Office Square, Suite 100 (OSRR07-2)
Boston, Massachusetts 02109-3912
Telephone: (617) 918-1527
Facsimile: (617) 918-0527

EPA shall not consider this project complete until it has received all submittals required under this Approval. Please be aware that upon EPA receipt and review of the submittals, EPA may request any additional information necessary to establish that the work has been completed in accordance with 40 CFR Part 761, the Notification, and this Approval.

Sincerely,

James T. Owens, Director
Office of Site Remediation & Restoration

cc: J. Krawiec, Resource Controls
MassDEP - Boston
File

Attachment 1

ATTACHMENT 1: PCB RISK-BASED APPROVAL CONDITIONS
RICHARD J MURPHY SCHOOL (the Site)
1 WORRELL STREET
DORCHESTER, MASSACHUSETTS

GENERAL CONDITIONS

1. This Approval is granted under the authority of Section 6(e) of the Toxic Substances Control Act (TSCA), 15 U.S.C. § 2605(e), and the PCB regulations at 40 CFR Part 761, and applies solely to the *PCB bulk product waste* and the *PCB remediation waste* located at the Site as described in the Notification.

2. Boston Public Schools (BPS) shall conduct on-site activities in accordance with the conditions of this Approval and with the Notification.

3. In the event that the cleanup plan described in the Notification differs from the conditions specified in this Approval, the conditions of this Approval shall govern.

4. The terms and abbreviations used herein shall have the meanings as defined in 40 CFR § 761.3 unless otherwise defined within this Approval.

5. BPS must comply with all applicable federal, state and local regulations in the storage, handling, and disposal of all PCB wastes, including PCBs, PCB Items and decontamination wastes generated under this Approval. In the event of a new spill during implementation of these cleanup activities, BPS shall contact EPA within 24 hours for direction on PCB cleanup and sampling requirements.

6. BPS is responsible for the actions of all officers, employees, agents, contractors, subcontractors, and others who are involved in activities conducted under this Approval. If at any time BPS has or receives information indicating that BPS or any other person has failed, or may have failed, to comply with any provision of this Approval, it must report the information to EPA in writing within 24 hours of having or receiving the information.

7. This Approval does not constitute a determination by EPA that the transporters or disposal facilities selected by BPS are authorized to conduct the activities set forth in the Notification. BPS is responsible for ensuring that its selected transporters and disposal facilities are authorized to conduct these activities in accordance with all applicable federal, state and local statutes and regulations.

8. This Approval does not: 1) waive or compromise EPA's enforcement and regulatory authority; 2) release BPS from compliance with any applicable requirements of federal, state or local law; or 3) release BPS from liability for, or otherwise resolve, any violations of federal, state or local law.

NOTIFICATION AND CERTIFICATION CONDITIONS

9. This Approval may be revoked if the EPA does not receive written notification from BPS of its acceptance of the conditions of this Approval within 10 business days of receipt.

10. BPS shall notify EPA in writing of the scheduled date of commencement of on-site activities at least 1 business day prior to conducting any work under this Approval.

11. Prior to initiating onsite work under this Approval, BPS shall submit the following information for EPA review and/or approval:

    a. a certification signed by its selected abatement contractor, stating that the contractor(s) has read and understands the Notification, and agrees to abide by the conditions specified in this Approval;

    b. a certification signed by the selected analytical laboratory, stating that the laboratory has read and understands the sample extraction and analysis requirements, and the quality assurance requirements specified in the Notification and in this Approval; and,

    c. A contractor work plan, prepared and submitted by the selected contractor(s), detailing the procedures that will be employed for removal of PCB-contaminated materials and for containment and air monitoring during removal activities. This work plan should also include information on waste storage, handling, and disposal for each waste stream type and for equipment decontamination.

CLEANUP AND DISPOSAL CONDITIONS

12. To the maximum extent practical, engineering controls, such as barriers, and removal techniques, such as the use of HEPA ventilated tools, shall be utilized during removal processes. In addition, to the maximum extent possible, disposable equipment and materials, including PPE, will be used to reduce the amount of decontamination necessary.

13. PCB-contaminated materials shall be removed and/or decontaminated, and verification sampling and analysis shall be conducted as described below:

a. All visible caulk shall be removed and PCB-contaminated *porous surfaces* (e.g. concrete) shall be encapsulated as described in the Notification.

i) Prior to encapsulation of PCB-contaminated *porous surfaces*, BPS shall collect samples to determine the PCB concentration remaining in these surfaces. Sampling of *porous surfaces* shall be performed on a bulk basis (i.e. mg/Kg). Samples shall be collected according to EPA's *draft* Standard Operating Procedure For Sampling Concrete in the Field, dated 12/30/97 to a maximum depth of 0.5 inches and at the frequency detailed in the July 26, 2010 addendum.

(1) Chemical extraction for PCBs shall be conducted using Method 3500B/3540C of SW-846; and, chemical analysis for PCBs shall be conducted using Method 8082 of SW-846, unless another extraction or analytical method(s) is validated according to Subpart Q.

ii) Following encapsulation of PCB-contaminated *porous surfaces*, post-encapsulation sampling shall be conducted to determine the effectiveness of the encapsulation.

(1) Wipe sampling of encapsulated surfaces shall be performed on a surface area basis by the standard wipe test as specified in 40 CFR § 761.123 (i.e. µg/100 cm^2). Samples shall be collected at the frequency detailed on Page 10 in the July 9, 2010 submittal.

(2) Chemical extraction for PCBs shall be conducted using Method 3500B/3540C of SW-846; and, chemical analysis for PCBs shall be conducted using Method 8082 of SW-846, unless another extraction or analytical method(s) is validated according to Subpart Q.

(3) In the event that PCB concentrations in the wipe samples are greater than (>) 1 µg/100 cm^2, BPS shall contact EPA for further discussion and direction on alternatives.

iii) BPS shall submit a monitoring and maintenance implementation plan (MMIP) to monitor the long-term effectiveness of the encapsulants in reducing exposure to building users (see Condition 15).

b. The decontamination standard for *non-porous surfaces* (i.e. metal window frames) shall be less than (<) 10 µg/100 cm^2 PCBs, with the exception of the metal window frames located at or above 10 feet from ground surface which may be decontaminated to < 100 µg/100 cm^2 if the < 10 µg/100 cm^2 decontamination standard cannot be achieved.

i) Sampling of *non-porous surfaces* shall be performed on a surface area basis by the standard wipe test as specified in 40 CFR § 761.123 (i.e. µg/100 cm^2).

(1) For the initial cleanup/decontamination activities associated with the half-moon windows and long windows (as identified in the July 26, 2010 submittal), the minimum confirmatory sampling frequency for decontaminated metal frames shall be 1 sample from each of the first 5 window locations associated with each window type (10 samples total).

(a) Chemical extraction for PCBs shall be conducted using Method 3500B/3540C of SW-846; and, chemical analysis for PCBs shall be conducted using Method 8082 of SW-846, unless another extraction or analytical method(s) is validated according to Subpart Q.

(b) If all PCB sampling results from the first 10 locations are < 10 µg/100 cm^2 (or are < 100 µg/100 cm^2 for the windows located at or above 10 feet), BPS may use the following alternative verification sampling scheme for the remainder of the project. The alternative scheme requires, at a minimum, the collection of at least 1 verification sample per every 4 (25%) decontaminated metal frames.

(c) In the event **any** verification sample that is collected using the alternative sampling scheme exceeds the PCB cleanup standard, BPS shall contact EPA for a determination on the appropriate verification sampling frequency for the remaining metal surfaces. Alternatively, BPS shall continue to use the initial confirmatory sampling frequency for the remainder of this project.

(2) For the cleanup/decontamination activities associated with the 7 square windows (as identified in the July 26, 2010 submittal), BPS shall collect at least 1 confirmatory sample from each window.

ii) For decontaminated *non-porous surfaces* that have PCB concentrations exceeding the decontamination standard, BPS may conduct additional decontamination to achieve the required decontamination standard.

14. PCB waste (at any concentration) generated as a result of the activities described in the Notification, excluding any decontaminated materials, shall be marked in accordance with CFR 40 CFR § 761.40; stored in a manner consistent with 40 CFR § 761.65; and, disposed of in accordance with 40 CFR § 761.61 or § 761.62, unless otherwise specified below.

a. Decontamination wastes and residues shall be disposed of in accordance with 40 CFR § 761.79(g)(6).

b. Moveable equipment, tools, and sampling equipment shall be decontaminated in accordance with either 40 CFR § 761.79(b)(3)(i)(A), § 761.79(b)(3)(ii)(A), or § 761.79(c)(2).

c. PCB-contaminated water generated during decontamination or dewatering shall be decontaminated in accordance with 40 CFR § 761.79(b)(1) or disposed of under § 761.60.

INSPECTION, MONITORING, MODIFICATION AND REVOCATION CONDITIONS

15. Within 90 days of completion of the work authorized under this Approval, BPS shall submit for EPA's review and approval, a detailed MMIP for the surface coating(s). BPS shall incorporate any changes to the MMIP required by EPA.

a. The MMIP shall include: a description of the activities that will be conducted, including inspection criteria, frequency, and routine maintenance activities; sampling protocols, sampling frequency, and analytical criteria; and, reporting requirements.

b. The MMIP shall include a communications component which details how the maintenance and monitoring results will be communicated to the Site users, including teachers, parents, student, other on-site workers, and interested stakeholders.

c. The MMIP also shall include a worker training component for maintenance workers or for any person that will be conducting work that could impact the building coatings.

d. BPS shall submit the results of these long-term monitoring and maintenance activities to EPA. Based on its review of the results, EPA may determine that modification to the MMIP is necessary in order to monitor and/or evaluate the long-term effectiveness of the coatings.

e. Activities required under the MMIP shall be conducted until such time that EPA determines, in writing, that such activities are no longer necessary.

16. BPS shall allow any authorized representative of the Administrator of the EPA to inspect the Site and to inspect records and take samples as may be necessary to determine compliance with the PCB regulations and this Approval. Any refusal by BPS to allow such an inspection (as authorized by Section 11 of TSCA) shall be grounds for revocation of this Approval.

17. Any proposed modification(s) in the plan, specifications, or information in the Notification must be submitted to EPA for review and approval. Any proposed modification(s) in the plan or specifications contained in the Notification or any departure from the conditions of this Approval without prior, written authorization from the EPA may result in the revocation, suspension and/or modification of the Approval, in addition to any other legal or equitable relief or remedy the EPA may choose to pursue.

18. Any misrepresentation or omission of any material fact in the Notification or in any records or reports may result in the EPA's revocation, suspension and/or modification of the Approval, in addition to any other legal or equitable relief or remedy the EPA may choose to pursue.

RECORDKEEPING AND REPORTING CONDITIONS

19. BPS shall prepare and maintain all records and documents required by 40 CFR Part 761, including but not limited to the records required under Subparts J and K. A written record of the decontamination and the analytical sampling shall be established and maintained by BPS in one centralized location, until such time as EPA approves in writing a request for an alternative disposition of such records. All records shall be made available for inspection to authorized representatives of EPA.

20. As required under Condition 15 of this Approval, BPS shall submit the results of the long-term monitoring and maintenance activities to EPA as specified in the final MMIP to be approved by EPA.

21. BPS shall submit a Final Completion Report (Report) to the EPA within 120 days of completion of the activities described under this Approval. At a minimum, this Report shall include: a discussion of the project activities, including any modifications that were made to the cleanup plan; characterization and post-abatement sampling analytical results; copies of the accompanying analytical chains of custody; field and laboratory quality control/quality assurance checks; an estimate of the quantity of PCBs removed and disposed off-site; copies of manifests and/or bills of lading; and, copies of certificates of disposal or similar certifications issued by the disposer, if applicable. The Report shall also include a copy of the recorded deed restriction and a certification signed by a BPS official verifying that the authorized activities have been implemented in accordance with this Approval and the Notification.

22. Required submittals shall be mailed to:

    Kimberly N. Tisa, PCB Coordinator
    United States Environmental Protection Agency
    5 Post Office Square, Suite 100 (OSRR07-2)
    Boston, Massachusetts 02109-3912
    Telephone: (617) 918-1527
    Facsimile: (617) 918-0527

23. No record, report or communication required under this Approval shall qualify as a self-audit or voluntary disclosure under EPA audit, self-disclosure or penalty policies.

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END OF ATTACHMENT 1